

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1-23. **(Cancelled)**

24. **(Currently Amended)** A method for displaying frames from an in-vivo image stream, the image stream comprising a series of frames captured in-vivo in a chronological order, said method comprising:

selecting a plurality of subsets of frames from the in-vivo image stream for display across a series of time slots;

for each subset, assigning at least one score to each frame of the subset based on a degree of variation between a predetermined criterion of each frame and a predetermined criterion of a reference frame; and

across a series of time slots, displaying at least a subset of the selected plurality of subsets of frames from the in-vivo image stream substantially simultaneously in each time slot, wherein the frames of the displayed subset of frames are positioned spatially in order of ascending or descending degree of variation based on the at least one score assigned thereto, wherein in each time slot a different subset of frames is displayed.

25. **(Previously Presented)** The method according to claim 24 comprising displaying the in-vivo image stream as a multi-frame image stream.

26. **(Previously Presented)** The method according to claim 25 comprising adjusting a rate at which the multi-frame image stream is displayed based on the content of the frames.

27. **(Cancelled)**

28. **(Previously Presented)** The method according to claim 24 wherein the score is assigned based on a degree of color variation of the displayed frames as compared to the reference frames.

29–30. **(Cancelled)**

31. **(Previously Presented)** The method according to claim 24 comprising adjusting the size of at least one of the frames displayed based on the assigned score.

32. **(Previously Presented)** The method according to claim 24 wherein the in-vivo image stream includes frames captured from more than one image sensor.

33. **(Previously Presented)** The method according to claim 24 comprising displaying sensor data from a sensor other than an image sensor substantially simultaneously as the frames from the in-vivo image stream.

34. **(Currently Amended)** A system for displaying frames of an in-vivo image stream, the system, the image stream comprising a series of frames captured in-vivo in a chronological order, the system comprising:

an in-vivo imaging device to transmit an in-vivo image stream;

a processor to select a plurality of subsets of frames from the in-vivo image stream for display across a series of time slots and for each subset assign at least one score to each of frame of the subset based on a degree of variation between a predetermined criterion of each frame and a predetermined criterion of a reference frame; and

a display to display across a series of time slots a multi-frame image stream, wherein each multi-frame image thereof displays at least a subset of the selected plurality of subsets of frames from the in-vivo image stream substantially simultaneously in each time slot, wherein the frames of the displayed subset of frames are positioned spatially in order of ascending or

descending degree of variation based on the at least one score assigned thereto,
wherein in each time slot a different subset of frames is displayed.

35. **(Previously Presented)** The system of claim 34 wherein the in-vivo imaging device is an autonomous capsule.

36. **(Previously Presented)** The system of claim 34 comprising a pH sensor.

37. **(Previously Presented)** The system of claim 34 wherein the scores are assigned based on data detected by a sensor.

38. **(Previously Presented)** The system of claim 34 wherein the processor is to adjust the stream rate of the multi-frame image stream.

39. **(Currently Amended)** A method for displaying frames from an in-vivo image stream, the image stream comprising a series of frames captured in-vivo in a chronological order, the method comprising:

transmitting an in-vivo image stream;

selecting a plurality of subsets of frames from the in-vivo image stream for display across a series of time slots;

for each subset, assigning at least one score to each frame of the subset based on a degree of variation between a predetermined criterion of each frame and a predetermined criterion of a reference frame; and

across a series of time slots, displaying at least a subset of the selected plurality of subsets of frames from the in-vivo image stream substantially simultaneously in each time slot, wherein the frames of the displayed subset of frames are positioned spatially in order of ascending or descending degree of variation based on the at least one score assigned thereto,
wherein in each time slot a different subset of frames is displayed.

40– 41. **(Cancelled)**

42. **(Previously Presented)** The method according to claim 39 wherein at least two of the plurality of frames are displayed having different sizes.

43. **(Previously Presented)** The method according to claim 39 wherein the score is assigned based on color variation of the plurality of frames as compared to the reference frames.

44. **(Previously Presented)** The method according to claim 24 wherein the reference frame represents healthy tissue and wherein frames having a high degree of variation with respect to the healthy tissue reference frame are displayed to represent pathologies.

45. **(Previously Presented)** The method according to claim 24 wherein the reference frame represents a pathology and wherein frames having a low degree of variation with respect to the pathology reference frame are displayed.

46. **(Previously Presented)** The method according to claim 24 comprising selecting or generating the reference frame.

47. **(Previously Presented)** The method according to claim 46 wherein selecting or generating the reference frame is based on the frame to be displayed.

48. **(Previously Presented)** The method according to claim 24 wherein the predetermined criterion is selected from the group consisting of: color, shape features, focusing, lighting, blood detection, and image content which may not be associated with a pathology.